D4SO Series
Installation Manual

Arecont Vision

megapixel technology...
beyond imagination

D4SO Outdoor Dome Installation Manual

Inside the box:

A. Arecont Vision D4SO Dome Camera
B. Mounting template
C. Security L-key
D. One double sided hex key
E. One single sided hex key
F. 6-position external power & IO plug
G. Pack of four (4) wood screws and four (4) dry wall anchors

Not included but needed:

- #1 Phillips head screw driver
- #2 Phillips head screw driver
- Small Flat Head screw driver

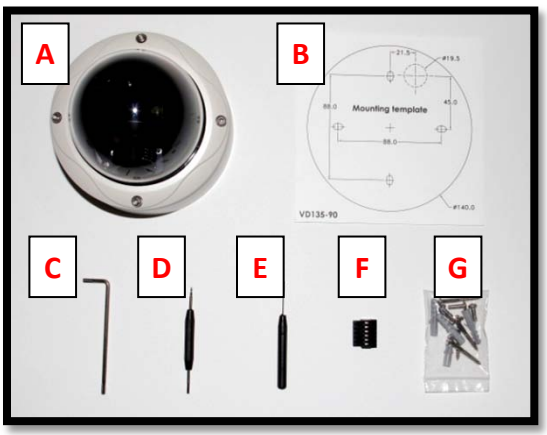

Image 1

1. Remove camera and hardware from the box.
2. Using the Mounting Template, prepare the mounting provisions for camera installation. *NOTE: the 19.5mm diameter hole on the Mounting template is where the Ethernet cable will be exiting the D4SO, align accordingly. If using the side conduit hole, please see **step 7** below.*
3. Using Security L-key, loosen the four (4) screws securing the dome cover **(Image 2)**. Remove vandal resistant dome cover. *NOTE: Do not remove screws from the dome cover.*

Image 2

Mounting the Camera:

4. Run Ethernet cable through the hole on the bottom of D4SO and plug it into the RJ45 port on Arecont Vision's compact MegaVideo® camera. **(Image 3)** . *NOTE: If the camera will be powered via PoE, please skip to* ***step 5****.*

Image 3

5. If the camera is powered by an outside power supply, run power wires through the hole and connect power wires to appropriate contacts of 6-postion connector using small flat screw driver and connect 6-position plug to camera as shown in **Image 4-1.**

   Note: Please make sure the polarity of the AC/DC input on the camera match the way wires are installed in connector shown in ***Image 4-2****.*

Image 4-1

Image 4-2

6. Align the holes in the camera with the prepared holes on the mounting surface. Attach the camera to the mounting surface with the wood screws or any optional hardware suitable for the mounting surface.

7. If you are using the side conduit opening, remove the conduit plug by first removing the socket set screw using one of provided Allen keys **(Image 5)**.

Image 5

Adjusting the Tilt and Pan:

8. To adjust the tilt, use a #1 Phillips screwdriver to loosen the screw on the side of the U bracket 1/4 turn **(Image 6)**. *CAUTION: Do not remove the screw!*

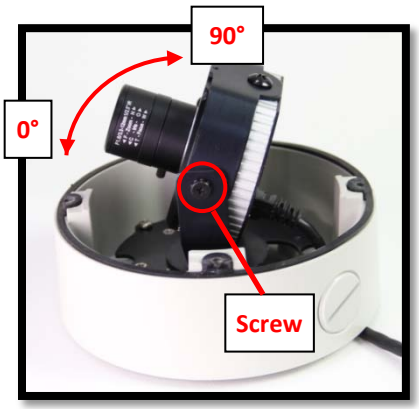

Image 6

9. Adjust lens tilt as required and tighten the screw. *CAUTION: To properly install camera, the U bracket needs to be installed between the dome **BASE** and camera **Bubble** shown in* **Image 7**

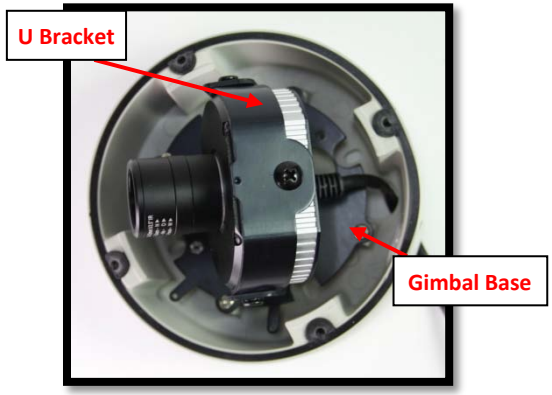

Image 7

10. To adjust the pan, hold and turn the U bracket as shown in **Image 8**.

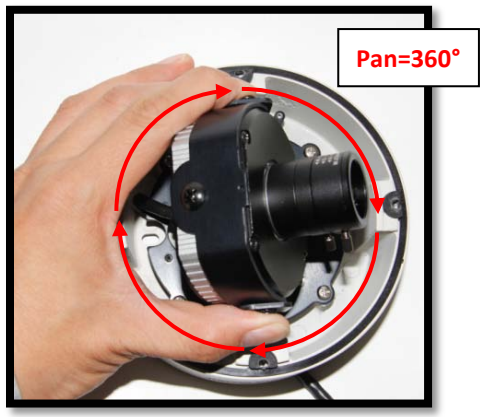

Image 8

Adjusting the Focus:

11. To focus the lens, loosen the three set screws as shown in **Image 9** and adjust each as needed. **A** adjusts the zoom, **B** adjusts the iris, **C** adjusts the focus.

    Note: Adjust zoom first then focus!

    Note: For more information on proper focusing technique, please watch the "Focusing Arecont Vision Megapixel Cameras" Best Practices Training Video at www.youtube.com/ArecontVision.

12. Secure the dome cover to the camera.

13. Tighten the set screw on the dome cover.

14. Rotate bubble to align camera with slot in camera shield.

15. Remove the protective film from the camera dome. *NOTE: be cautious not to scratch the vandal dome cover.*

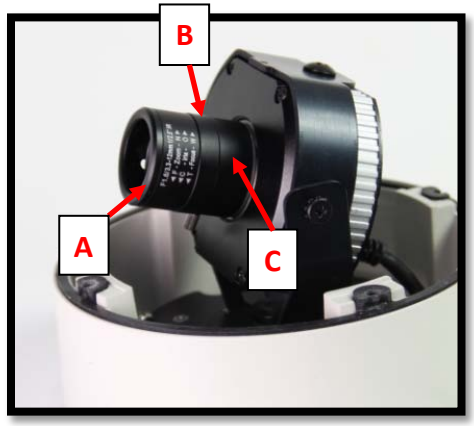

Image 9

D4SO Pendant Mount (MD-CMT) Installation Instructions

Inside the box:

A. Top shield
B. Pendant Mount
C. Mounting template
D. Pack of four (4) machine screws
E. Pack of four (4) small machine screws
F. Pack of four (4) wood screws and four (4) dry wall anchors
G. Large round rubber gasket
H. Smaller square rubber gasket
I. One double sided hex key

Not included but needed:

- #2 Phillips head screw driver

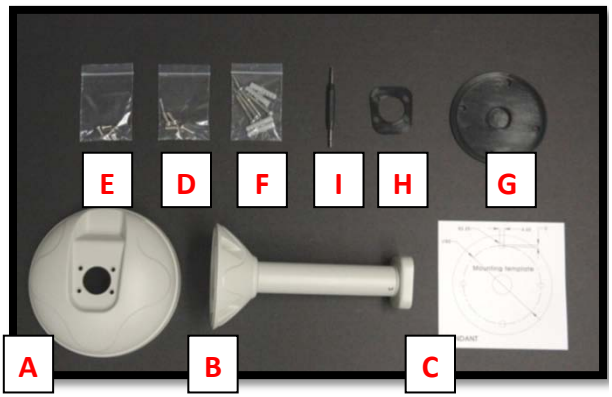

Image 10

1. Remove Pendant Mount and hardware from the box.

Image 11

Image 12

2. Using the Mounting template, prepare the mounting provisions for camera installation.
3. Place small gasket onto pendant dome as shown in **image 11**.
4. Attach Dome to Pendant as shown in **Image 12** using four machine screws provided.
5. Install large round rubber gasket onto Pendant as shown in **image 12**. Be sure to align the holes appropriately.
6. Run Ethernet Cable and outside power cable (if necessary) through the Pendant.
7. Attach Pendant to the ceiling using the four wood screws provided or any optional hardware suitable for the mounting surface.
8. For installation of the camera, please reference "**Mounting the Camera**".

D4SO Wall Mount (MD-WMT2) Installation Instructions

Caution:

MD-WMT2 only fits with SV-JBA and SV-EBA but not with MD-JBA and MD-EBA!

Inside the box:

A. Wall mount (Fit 1.5 NPT Standard)
B. Top shield
C. Mounting template
D. One double sided hex key
E. Pack of four (4) machine screws
F. Pack of four (4) wood screws and four (4) dry wall anchors

Not included but needed:

- #2 Phillips head screw driver

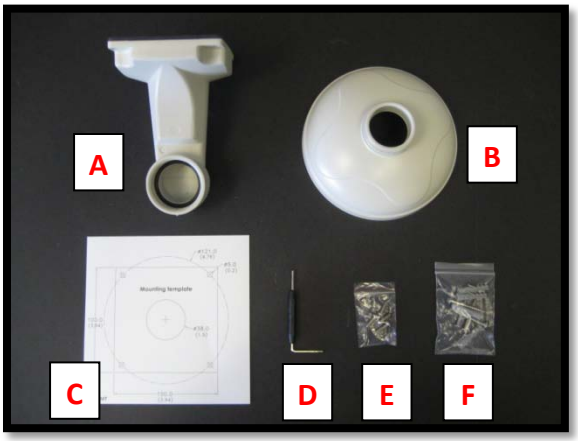

Image 13

1. Remove Wall Mount and hardware from the box.

Image 14

2. Using the Mounting template, prepare the mounting surface.
3. Install Top Shield on Wall Mount as shown in **image 14**.
4. Fasten the socket set screw using double side hex key.
5. Run Ethernet Cable and outside power cable (if necessary) through the Wall Mount.
6. Attach Wall Mount to the wall using drywall screws or any optional hardware suitable for the mounting surface.
7. For installation of the camera, please reference "**Mounting the Camera**".

D4SO Wall Mount Cap (MD-CAP) Installation Instructions

Inside the box:

A. Wall Mount Cap (MD-CAP)
B. Pack of four (4) machine screws

Not included but needed:

- 1½" NPT Pipe
- 1½" NPT Coupling
- 1½" NPT Flange
- #2 Phillips head screw driver

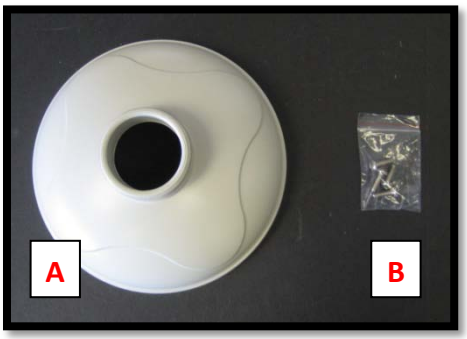

Image 15

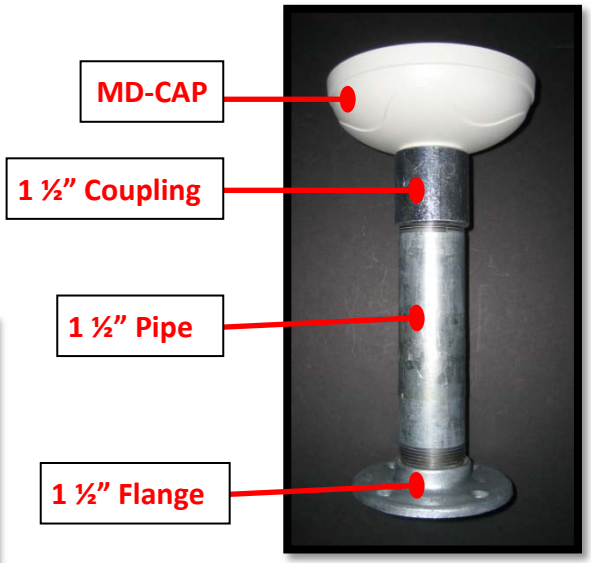

Image 16

1. Remove Wall Mount Cap from the box.
2. Assemble Wall Mount Cap, 1½" Coupling, 1½" Pipe nipple and 1½" Flange as a Pendant Mount shown in **image 16**.
3. Run Ethernet Cable and outside power cable (if necessary) through the Pendant.
4. Attach Pendant to the ceiling using four wood screws or any optional hardware suitable for the mounting surface
5. For installation of the camera, please reference "**Mounting the Camera**".

D4SO Junction Box Adapter (MD-JBA) Installation Instruction

Caution:

MD-JBA only fits with D4SO and MD-CMT but not with MD-WMT2!

Inside the box:

A. Junction Box Adapter
B. Large round rubber gasket
C. Pack of four (4) wood screws and four (4) dry wall anchors
D. Pack of four (4) machine screws
E. One double sided hex key

Not included but needed:

- #2 Phillips head screw driver
- D4SO Wall Mount, MD-WMT
- ¾" NPT Conduit (if necessary)

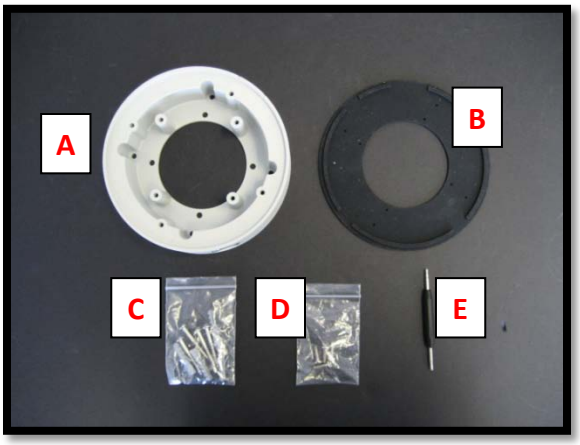

Image 17

1. Remove Junction Box and hardware from the box

Image 18

Image 19

2. Remove the conduit plug by first removing the socket set screw using one of provided Allen keys shown in **Image 18**.

3. Attach Junction Box Adapter to the wall using drywall screws or any optional hardware suitable for the mounting surface.

4. Attach D4SO Wall Mount to Junction Box Adapter as shown in **Image 19**.

5. Connect ¾" NPT Conduit to Junction Box Adapter

6. Run Ethernet Cable and outside power cable (if necessary) through the Junction Box Adapter and Wall Mount.

7. For installation of the camera, please reference "**Mounting the Camera**".

D4SO Junction Box Adapter (SV-JBA) for MD-WMT2 Installation Instruction

Caution:

SV-JBA only fits with MD-WMT2 but not with D4SO and MD-CMT!

Inside the box:

A. Junction Box Adapter
B. Pack of four (4) machine screws
C. One double sided hex key
D. Pack of four (4) wood screws and four (4) dry wall anchors
E. Large round rubber gasket

Not included but needed:

- #2 Phillips head screw driver
- D4SO Wall Mount, MD-WMT
- ¾" NPT Conduit (if necessary)

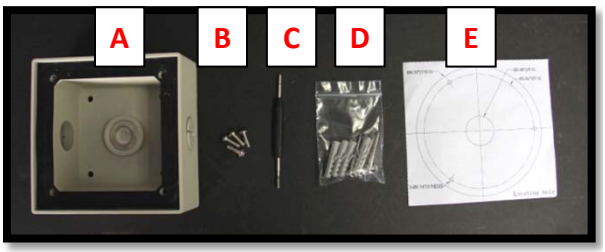

Image 20

1. Remove Junction Box and hardware from the box

Image 21

2. Remove the conduit plug by first removing the socket set screw using one of provided Allen keys.

3. Attach Junction Box Adapter to the wall using drywall screws or any optional hardware suitable for the mounting surface.

4. Attach D4SO Wall Mount to Junction Box Adapter as shown in **Image 21**.

5. Connect ¾" NPT Conduit to Junction Box Adapter.

6. Run Ethernet Cable and outside power cable (if necessary) through the Junction Box Adapter and Wall Mount.

7. For installation of the camera, please reference "**Mounting the Camera**".

D4SO Flush Mount Adapter (MD-FMA) Installation Instructions

Inside the box:

A. White Trim Ring
B. Flush Mount Adapter
C. Mounting template
D. Pack of four (4) machine screws and one (1) I-Blot

Not included but needed:

- #2 Phillips head screw driver

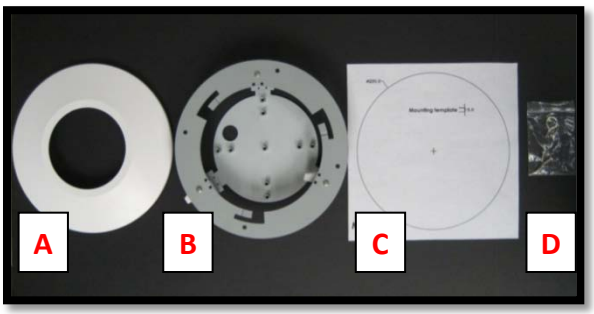

Image 22

1. Remove Flush Mount Adapter, Trim Ring and hardware from the box.

2. Attach Dome to Flush Mount Adapter as shown in **Image 23**. Please reference "**Mounting the Camera**", if needed.

3. Using the Mounting template, cut a hole in surface for mounting.

4. Insert Flush Mount Adapter into the hole.

5. Screw the "lever screws" until the FMA is snuggly installed, as shown in **Image 23**. The "Support Arm" will ride down the screw to compress the mounting surface**.** *NOTE: Do not over-torque the lever screws*

6. Attach the Trim Ring to the Flush Mount Adapter by rotating clockwise as show in **Image 24.**

Image 23

Image 24

D4SO Electrical Box Adapter (MD-EBA) Installation Instructions

Caution:

MD-EBA fits with D4SO and MD-CMT but not with MD-WMT2!

Inside the box:

A. Electrical Box Adapter
B. Pack of four (4) machine screws

Not included but needed:

- #2 Phillips head screw driver
- Common Electrical Box, such as single gang box, double gang box or square electrical box.

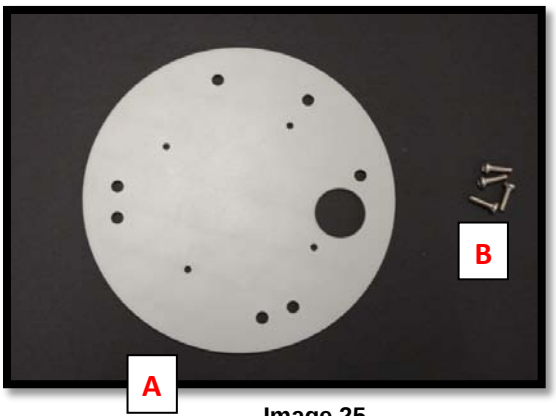

Image 25

1. Remove Electrical Box Adapter and hardware from the box.

2. Match mounting holes on adapter with thread holes on the electrical box, make sure every threaded hole is matched with mounting hole.

3. Attach Electrical Box Adapter to Electrical Box as shown in **Image 26**.

4. Attach Dome to Electrical Box Adapter as shown in **Image 27**. Please reference "**Mounting the Camera**", if needed.

Image 26

Image 27

D4SO Electrical Box Adapter (SV-EBA) for SV-WMT2 Installation Instructions

Caution:

SV-EBA fits with MD-WMT2 but not with D4SO and MD-CMT!

Inside the box:

A. Electrical Box Adapter
B. Pack of four (4) machine screws

Not included but needed:

- #2 Phillips head screw driver
- Common Electrical Box, such as single gang box, double gang box or square electrical box.

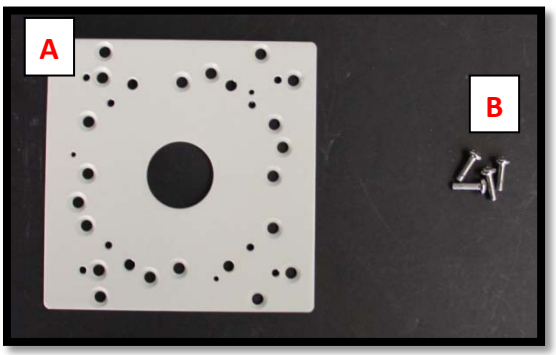

Image 28

1. Remove Electrical Box Adapter and hardware from the box.

2. Match mounting holes on adapter with thread holes on the electrical box, make sure every threaded hole is matched with mounting hole.

3. Attach Electrical Box Adapter to Electrical Box.

4. Attach Dome to Electrical Box Adapter as shown in **Image 29**. Please reference "**Mounting the Camera**", if needed.

Image 29

D4SO Pole Mount Adapter (MD-PMA) Installation Instructions

Inside the box:

A. Pole Mount Adapter
B. 2x Compress Fittings
C. 2x Small Steel Straps
D. 2x Large Steel Straps
E. Pack of four (4) machine screws

Not included but needed:

- #2 Phillips head screw driver
- D4SO Wall Mount Adapter

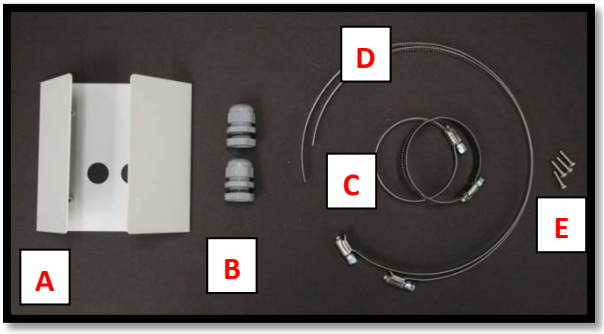

Image 30

1. Remove Pole Mount Adapter, Compress Fittings, Steel Straps and hardware from the box.

2. Install Compress Fittings to Pole Mount Adapter as shown in **Image 31**.

3. Attach D4SO Wall Mount Adapter to Pole Mount Adapter as shown in **Image 32**.

4. Run Ethernet Cable and outside power cable (if necessary) through the Compress Fittings and D4SO Wall Mount.

5. Use the supplied two Steel Straps to attach the Pole Mount Adapter to the pole and tighten the compression screws as shown in **Image 32**.

6. Attach Dome to Wall Mount Adapter. Please reference "**Mounting the Camera**", if needed.

7. Tighten the Compress Fittings to seal the wiring holes.

Image 31

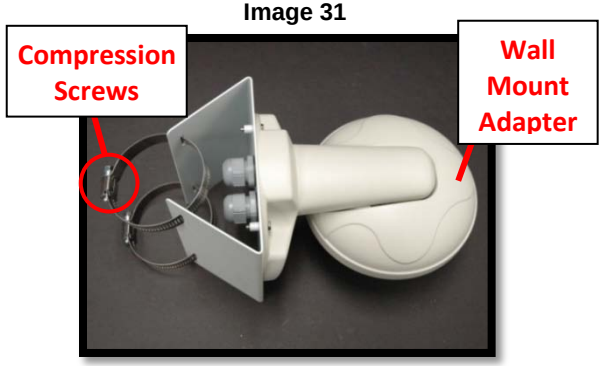

Image 32

D4SO Corner Mount Adapter (MD-CRMA) Installation Instructions

Inside the box:

A. Corner Mount Adapter
B. 2x Compression Fittings
C. Pack of four (4) machine screws
D. 2x Packs of four (4) wood screws and four (4) dry wall anchors

Not included but needed:

- #2 Phillips head screw driver
- D4SO Wall Mount Adapter

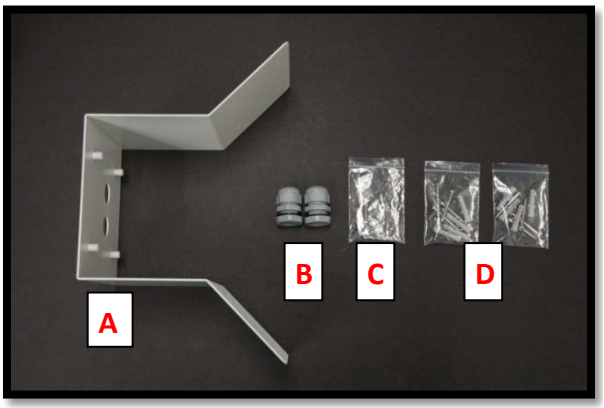

Image 33

1. Remove Corner Mount Adapter, Compress Fitting and hardware from the box.

2. Install Compress Fittings to Corner Mount Adapter as shown in **Image 34**.

3. Attach Wall Mount Adapter to Corner Mount Adapter as shown in **Image 35**.

Image 34

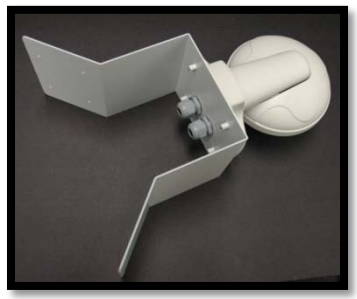

Image 35

4. Run Ethernet Cable and outside power cable (if necessary) through the Compress Fittings and D4SO Wall Mount.

5. Using the screws provided (or other hardware) attach the Corner Mount Adapter to an exterior 90° corner wall.

6. Attach Dome to Wall Mount Adapter. Please reference "**Mounting the Camera**", if needed.

7. Tighten the Compress Fittings to seal the wiring holes.

D4SO I/O Cable Connection

Not included but needed:

- Flat head screw driver

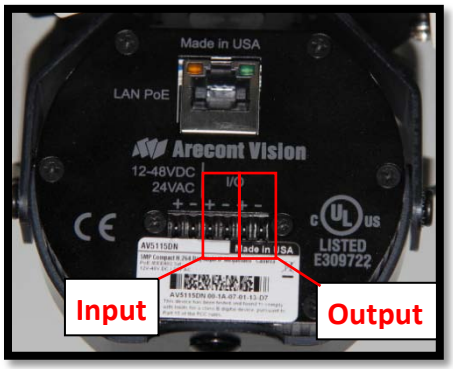

Image 36

1. To use the I/O ports of the D4SO, insert the connector to Arecont Vision Compact camera and locate the "I/O" parts as shown in **Image 37**. *NOTE: There are six connectors that look identical, be sure to use correct I/O ports shown in **Image 36**.*

Image 37

2. Run the I/O cable through the hole in the bottom of the camera and plug it into the "J7" connector as shown in **image 33**. *NOTE: The connection is a little stiff so be sure to apply enough pressure to connect it; using a flat head screw driver to push it in is recommended.*

Electrical Characteristics:		**Min**	**Max**
Input voltage (V) (measured between + and – terminals)	ON	2.9	6.3
	OFF	0	1.3
Output current (mA) (measured between + and – terminals) Applied Voltage Rage: 0 - 80V	ON	-	50
	OFF	-	0.1

Table 1

NOTE: Both the input and the output are electrically isolated from the rest of the camera's electrical circuitry via general-purpose photo couplers. The input is additionally protected with a serial 250 Ohm resistor, and a debouncing circuit. Duration of any input signal should be at least 5 ms to comply with the requirements of the debouncing circuit.

Orange	OUT +
Yellow	OUT –
White	IN +
Black	IN -

Table 2

D4SO Heater (MD-1HK) Accessory

Inside the box:

A. Heater
B. Two (2) screws

Not included but needed:

- #1 Phillips head screw driver

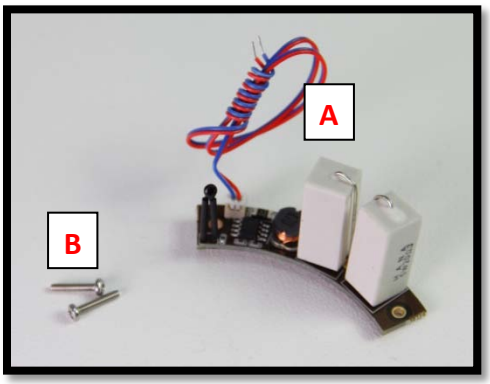

Image 38

1. Run the heater cable out of the hole in the bottom of the camera and connect it to 10-50VDC power supply. 10 Watts max. Red is positive (+) cable.

2. Remove the heater kit from the box.

3. With the heater element protruding out of the camera, align the two (2) holes on the heater board with the two standoffs shown in **Image 39**.

4. Screw the heater board to the standoffs as shown in **Image 40**.

Image 39

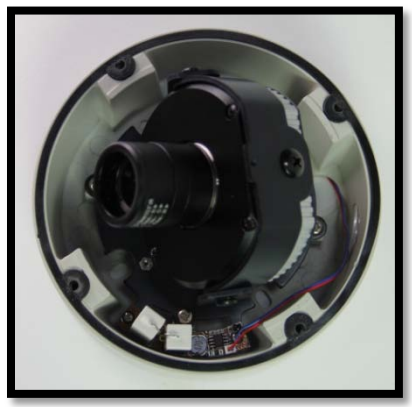

Image 40

Leading
the **way** in
Megapixel
video

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